

Energy Medicine

There is a profound evolutionary shift that is taking place in the world that can be seen in the growing recognition of the fundamental role that energy plays in healing (Benor, 1992). The grandfather of this revolution of energy healing in the West is Dr. Robert Becker. In the early 1980s, he was one of the first scientists to measure the “current of injury” associated with healing wounds and bone fractures. In his early research on the healing and regeneration of salamanders, Becker (1985) showed that the control system that started, regulated, and stopped healing was electrical (pp. 235–236).

Becker’s work built upon the work of other scientists, such as Harold Burr, a Yale School of Medicine neuroanatomist who measured the electrical field around an unfertilized salamander and put forth research that physical illness is preceded by changes in an organism’s electromagnetic field (Burr & Northrup, 1935). Scientist Owen Frazer reported in 1909 that passing electrical currents through water containing young salamanders speeded up the regeneration of amputated limbs (as cited in Becker, 1985, p. 82). Since that time, there have been numerous well-researched studies showing the efficacy of various forms of energy in healing.² Some have described this paradigm shift as a revolution, signaling a move from a Newtonian to an Einsteinian medicine model. From Einstein’s insights about how energy is a key to opening the mysteries of the universe, and the physical sciences developing that idea further, we are now on the edge of harnessing those mysteries in the arena of medicine and healing. As paraphrased from Gerber (1996, p. 43):

Newtonian thinkers see the human body as a series of intricate chemical systems powering a structure of nerve, muscle, flesh, and bones. The physical body is viewed as a supreme mechanism, intricate physical clockwork down to the very cellular structure. Einsteinian Medicine sees human beings as networks of complex energy fields that interface with physical/cellular systems. There is a hierarchy of subtle energetic systems that coordinate electrophysiological, hormonal, and cellular structure of the physical body. It is from these subtle levels that health and illness originate. These unique energy systems are powerfully affected by emotions, spiritual balance, nutrition, and environment. They influence cellular patterns of growth.³

This energy-related revolution is affecting a wide variety of disciplines, including physics, biology (Pert, 1997; Lipton, 2005), and medicine, and should no longer be considered fringe science—it is now thought to be mainstream. Western knowledge of energy in the human organism has come a long way from believing that nerves are the only part of the body that contain electricity. We now know that the body emits a broad spectrum of electromagnetic and acoustic radiation that has been measured by magnetic resonance imaging (MRI), electroencephalogram (EEG), electrocardiogram (EKG), electromyogram (EMG), thermography, and ultrasound. These instruments are used to monitor and diagnose diseases.

Behind the everyday use of instruments to measure energies lies a once-in-an-era change in the very foundation of science. It was Dr. Lipton (2005), cell biologist and

author of *The Biology of Belief*, who wrote that the pyramid of science is changing. With this shift at the bottom of the pyramid showing physics changing from a Newtonian mechanistic view to one of quantum mechanics, energy and energy fields have come to the forefront of importance. Lipton says that once the bottom of the pyramid of science in physics shifts, all of the levels—chemistry, biology, and psychology—need to shift as well.

Although Western medicine uses instruments, such as the EEG, to read energy fields, it has not taken the next step in understanding the role energy plays in other ways, according to Dr. Lipton. He shows how animals, from single cells to humans, convert environmental stimuli into physiological and behavioral responses. Dr. Lipton says that scientific research has revealed that “every facet of biological regulation is profoundly impacted by the ‘invisible forces’ of the electromagnetic spectrum ... electromagnetic radiation regulates DNA, RNA and protein synthesis, alters protein shape and function, and controls gene regulation, cell division, cell differentiation, morphogenesis [the process by which cells assemble into organs and tissues] hormone secretion, nerve growth and function...” Dr. Lipton laments that “though these research studies have been published in some of the most respected mainstream biomedical journals, their revolutionary findings have not been incorporated into our medical school curriculum” (Lipton 2005, as cited by Feinstein & Eden, 2006b). Most important for this book, Dr. Lipton speaks about the implications of this for the field of psychology and shows how the newly identified cellular mechanisms include master switches through which our thoughts, attitudes, and beliefs create the conditions of our body and of our place in the world.

Energy medicine is increasingly becoming a part of the new theoretical underpinnings of “a medicine for the twenty-first century.” Candace Pert, PhD, author of *Molecules of Emotion: The Science behind Mind-Body Medicine* (1997) and research professor at Georgetown University School of Medicine, calls this revolution “New Paradigm Medicine.” She says, “While not well understood, subtle energies can be operationally defined as energies that cannot be measured using existing instrumentation but which, like gravity, are known for their effects. Energy is also hypothesized as being somehow involved in the elusive link between chemistry and consciousness” (Pert as cited in Feinstein, 2004a). Other frontier scientists report that they are able to measure “the biofield” with sensitive magnetometers, such as the SQUID (Rubik, 2002). The biofield is comprised of an extremely weak but measurable electromagnetic field with its own waveform, intensity, polarity, and modulation patterns that surrounds all living systems. And for those of us who believe that only big things can create big changes, it should be noted that Becker found that tiny currents, on the order of a billionth of an ampere, were more effective than larger currents in stimulating tissue regeneration (Becker, Spadao, & Marino, 1977).

Modern science has demonstrated that electromagnetic fields of the body are generated during various biological processes, including rapid cell division; during natural growth processes, such as growth of bone cells; as well as following fracture, intense nervous activity associated with mental processes, and various pathological conditions, such as abnormal cell growth with diseases like cancer. The distinction between conservative medical practitioners and the new proponents of energy medicine is summed up well by one of the early researchers in the field, Dr. Glen Rein (1992), who

wrote:

It is now well known that the human body emits a broad spectrum of electromagnetic and acoustic radiation. Traditional medicine looks at these as by-products of biochemical reactions in the body. They are not considered by most biomedical researchers to be involved with the basic functioning (or healing) of the body. The basic tenet of energy medicine is that these fields are not only involved with functioning of physical/chemical body but regulate these processes. (p. 7)

Dr. Rein is not alone in his views. A variety of scientists are now documenting how organizing fields of energy may be responsible for directing genes and biochemical processes like a conductor directs an unimaginably big orchestra (McTaggart, 2003, p. 45); and these organizing fields direct biochemical processes as decisively as a magnetic fields aligns metal filings (Liboff, 2004). This paradigm shift has major implications for an expanded approach to medicine. Does this field hold the key to the Grail Castle that that will restore our depleted inner land?

Energy medicine is used in the treatment of disease. It is now commonplace to hear of athletes using transcutaneous electrical nerve stimulation units (TENS) to deal with the effects of pain. Nurses in many hospitals use energy-healing methods (approved by the North American Nursing Diagnosis Association), such as therapeutic touch and its cousin—healing touch—to treat their patients. Research is also accumulating to show the efficacy of touch in reducing anxiety among institutionalized patients (Gagne & Toyé,

1994), in alleviating depression in breast cancer patients (Nurse Healers-Professional Associates, 2000; Moreland, 1998), in enhancing immune system response (Quinn & Stelkaudal, 1993), and in accelerating wound healing (Wirth, 1991).

At leading-edge hospitals, energy medicine is being explored in a variety of ways. For example, at New York's Columbia Presbyterian Hospital, cardiac surgeon Dr. Memmot Oz has had Julie Motz, an energy healer, use energy-emission methods with her hands prior to, during, and following surgery for heart replacement surgery. It has been reported that there are less cardiac rejections when such energy-medicine procedures take place.⁴

Interestingly Harold Saxton Burr, the neuroanatomist at Yale University, back in the 1930s showed that disease shows up in the patient's energy system before manifesting as symptoms, and he believed that restoring balance to a person's energy system could treat physical diseases. This early research has been followed up by recent research reported in the *Journal of Biology and Chemistry* that the uterus of women with uterine cancer had a negative charge and that those without cancer had a positive charge. The negative charge in many tumors is assisting in the diagnosis and treatment of breast cancer.⁵

Treatments that influence the brain's electrical activity are being used to overcome a range of psychiatric and other medical disorders. The magnetic stimulation of specific areas of the brain has been shown in double-blinded, placebo-controlled research to help with major depression that did not respond to other therapies (Fitzgerald, 2003), and with bipolar disorder (Rohan, 2004). The surgical implantation of deep-brain stimulators that deliver targeted electrical stimulation in the brain have helped thousands

of patients with Parkinson's disease to better control their symptoms; and these brain pacemakers are also used with some success to stimulate the vagus nerve in treating severe depression, compulsive disorders, and other neurological conditions (Archart-Treichel, 2003).

Differentiating between the energy that is electricity and the energy that is constellated in various human emanation and self-cultivation traditions is part of the work of the field of energy medicine. There is much research in each of these areas that is worthy of efforts to replicate further and substantiate initial results. For example, Dr. Bjorn Nordenstrom (1983) has experimented with electricity's effect on tumors and reports a cure or prevention rate in ten out of twenty patients.⁶

Chinese medicine in the form of acupuncture is now a well-accepted part of Western complementary health care and is a licensed health profession in many states. Scientific evidence is mounting to support the long-held empirical claims of acupuncturists. Among the mental-health conditions that the World Health Organization lists as being responsive to acupuncture are anxiety, depression, stress reactions, and insomnia. An acupuncture needle inserted into a specific point on the toe can be seen in a functional MRI as affecting blood activity in the brain—though no nerve, vascular, or other physical connections are known to exist there (Cho et al., 1998). Another study using an MRI demonstrated that stimulating specific points on the skin not only changed brain activity but also deactivated areas of the brain that are involved with the experience of fear and pain (Hui, 2000). Other components of the Chinese medical tradition, such as Tai Chi and Qigong, are also gaining acceptance. The *Journal of the American Medical Association* published a study showing that Tai Chi prevented more falls among the elderly than nine

other forms of Western exercise (Province et al., 1995). Qigong is taught at California Pacific Medical Center in San Francisco and other leading-edge medical institutions. There are Qigong studies showing beneficial results on hypertension (Kuang et al., 1991) and many medical disorders (Sancier, 1996b). Determining which type of energy medicine should be used for different conditions, and at what times, is a next step for researchers.

² The International Society for the Study of Subtle Energies and Energy Medicine (ISSSEEM) has compiled hundreds of very well researched studies, as has the excellent scholarly research compendium of Daniel Benor (1992). For an easier read, Dr. Richard Gerber (1996) presents a good overview of the field in his book *Vibrational Medicine*, as does Andy Baggott (1999) in *The Encyclopedia of Energy Healing*.

³ Paraphrased from Gerber, R. (1966). *Vibrational medicine*. (Bear & Co.) p. 43.

⁴ For a description of Dr. Mehmet OZ and Julie Motz's work, see Benor, D. (1992). *Spiritual healing: Scientific validations of a healing revolution*, pp. 95-96. I was very fortunate to have had the opportunity to take a workshop with Julie Motz, sponsored by The Health Medicine Institute.

⁵ Burr, H.S. (1957), *Yale Journal of Biology and Medicine*, 30, p.161. As reported by Church, D., *The genie in your genes*, Elite Books, 2007, p. 124.

⁶ Nordenstrom, B.E. (1983). *Biologically closed circuits: Experimental and theoretical evidence for an additional circulatory system*. (Stockholm, Sweden: Nordic Medical Publications). See Heilberg, E. (1983, Winter.) **ISSEEM**, 4 (4), 5. One must be cautious about interpreting this research because electricity has been shown to increase as well as decrease tumors.

From *Energy Psychology* by Michael Mayer, published by North Atlantic Books, copyright © 2009 by Michael Mayer. Reprinted by permission of publisher.